

ABSTRACT

An object is to provide a memory apparatus capable of accurately reading out data stored in a memory element of variable resistance.

5 To this end, the memory apparatus according to the present invention uses a memory element of variable resistance whose resistance is variable between a high resistance state having a higher resistance than the resistance of the reference resistance element and a low
10 resistance state having a lower resistance than the resistance of the reference resistance element, wherein the reference circuit of the resistance element and the reference resistance element connected in series between two reference potential terminals of different potentials
15 and the memory circuit of a series connection of the resistance element and the memory element of variable resistance with the reference circuit and the memory circuit connected in parallel with each other, and the reference resistance element is constructed to have a variable
20 resistance.